

REMARKS

Claims 1, 3-27, and 29-41 are now present in this application.

Claims 1, 4-9, 27, and 30 have been amended, and claims 2 and 28 have been cancelled without prejudice or disclaimer of the subject matter contained therein. Reconsideration of the application, as amended, is respectfully requested.

Claims 1-41 stand rejected under 35 USC 103 as being unpatentable over KMETEC et al., U.S. Patent 5,757,831, in view of BERGMANN, U.S. Patent 6,128,133. This rejection is respectfully traversed.

Independent claims 1 and 27 have been amended to include limitations from dependent claims 2 and 28, respectively. These claims specify that the substantially fixed percentage of the secondary output light beam is substantially invariant to wavelength variations of the first light beam within a predetermined wavelength range.

It is respectfully submitted that even though BERGMANN discloses a beam splitter for use in a system where a beam splitter reflects a portion of incident light and transmits a portion of incident light, where the reflected portion is a fixed fraction of the incoming or transmitted portion, there is no disclosure of the fixed fraction of the incoming light beam being substantially invariant to wavelength variations of the first light beam within a predetermined wavelength range.

The beam splitter disclosed by BERGMANN has two surfaces and the light is reflected to the photo detector from both surfaces (see Fig. 2, for example). By appropriately selecting the coating of at least one of the two surfaces, it may be ensured that the two reflected beams are orthogonally polarized and thus do not interfere. It is hereby avoided that undesired ripple is produced in the wavelength response to the photo detector.

BERGMANN does only mention the possibility of ripple formation in relation to interference between beams reflected from the two surfaces. It is nowhere in BERGMANN disclosed nor discussed that the transmitted light is independent on variations in the wavelength of the incoming light beam.

On the contrary, it is seen from Figs. 4-6, for example, that the reflectance is strongly wavelength dependent and that even small fluctuations or variations in the wavelength of the incoming light beam will result in a significant change in reflectance. Even though the beam splitter disclosed by BERGMANN on the face of it seems to be of the same type as the beam splitter disclosed by the present invention, it is clear from the descriptions of the two beam splitters that they are not of the same type. The coating process is highly complex and as it is seen, many different resulting coatings may be achieved even by employing similar materials.

Thus, there is in BERGMANN no disclosure of having the substantially fixed percentage of the secondary output light beam being substantially invariant to wavelength variations of the first light beam within a predetermined wavelength range.

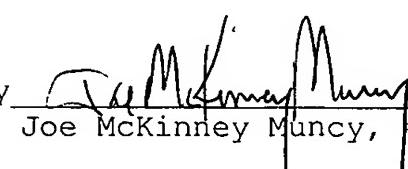
Accordingly, it is respectfully submitted that the prior art utilized by the Examiner would neither suggest nor render obvious the claims of the present application. Reconsideration and withdrawal of the 35 USC 103 rejection are therefore respectfully requested.

In the event that any outstanding matters remain in this application, the Examiner is invited to contact the undersigned at (703) 205-8000 in the Washington, D.C. area.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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